

RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: 10/540,959
Source: PCI
Date Processed by STIC: 7/2/05

ENTERED



PCT

RAW SEQUENCE LISTING

DATE: 07/12/2005

PATENT APPLICATION: US/10/540,959

TIME: 10:04:22

Input Set : D:\A184seq.txt

Output Set: N:\CRF4\07122005\J540959.raw

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4 <110> APPLICANT: BIOGEN IDEC MA INC.
5   RENNERT, Paul
7 <120> TITLE OF INVENTION: KIM-1 Antagonists and Use to Modulate
8   Immune System
10 <130> FILE REFERENCE: A184 PCT
C--> 12 <140> CURRENT APPLICATION NUMBER: US/10/540,959
C--> 13 <141> CURRENT FILING DATE: 2005-06-28
15 <150> PRIOR APPLICATION NUMBER: 60/436934
16 <151> PRIOR FILING DATE: 2002-12-30
18 <160> NUMBER OF SEQ ID NOS: 5
20 <170> SOFTWARE: FastSEQ for Windows Version 4.0
22 <210> SEQ ID NO: 1
23 <211> LENGTH: 518
24 <212> TYPE: PRT
25 <213> ORGANISM: Artificial Sequence
27 <220> FEATURE:
28 <223> OTHER INFORMATION: Human KIM-1 Extracellular Domain Fc Construct
30 <400> SEQUENCE: 1
31 Met His Pro Gln Val Val Ile Leu Ser Leu Ile Leu His Leu Ala Asp
32 1          5          10          15
33 Ser Val Ala Gly Ser Val Lys Val Gly Gly Glu Ala Gly Pro Ser Val
34          20          25          30
35 Thr Leu Pro Cys His Tyr Ser Gly Ala Val Thr Ser Met Cys Trp Asn
36          35          40          45
37 Arg Gly Ser Cys Ser Leu Phe Thr Cys Gln Asn Gly Ile Val Trp Thr
38          50          55          60
39 Asn Gly Thr His Val Thr Tyr Arg Lys Asp Thr Arg Tyr Lys Leu Leu
40 65          70          75          80
41 Gly Asp Leu Ser Arg Arg Asp Val Ser Leu Thr Ile Glu Asn Thr Ala
42          85          90          95
43 Val Ser Asp Ser Gly Val Tyr Cys Cys Arg Val Glu His Arg Gly Trp
44          100         105         110
45 Phe Asn Asp Met Lys Ile Thr Val Ser Leu Glu Ile Val Pro Pro Lys
46          115         120         125
47 Val Thr Thr Thr Pro Ile Val Thr Thr Val Pro Thr Val Thr Thr Val
48          130         135         140
49 Arg Thr Ser Thr Thr Val Pro Thr Thr Thr Thr Val Pro Thr Thr Thr
50 145         150         155         160
51 Val Pro Thr Thr Met Ser Ile Pro Thr Thr Thr Thr Val Pro Thr Thr
52          165         170         175
53 Met Thr Val Ser Thr Thr Thr Ser Val Pro Thr Thr Thr Ser Ile Pro
54          180         185         190
55 Thr Thr Thr Ser Val Pro Val Thr Thr Thr Val Ser Thr Phe Val Pro

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```

56          195          200          205
57 Pro Met Pro Leu Pro Arg Gln Asn His Glu Pro Val Ala Thr Ser Pro
58          210          215          220
59 Ser Ser Pro Gln Pro Ala Glu Thr His Pro Thr Thr Leu Gln Gly Ala
60 225          230          235          240
61 Ile Arg Arg Glu Pro Thr Ser Ser Pro Leu Tyr Ser Tyr Thr Thr Asp
62          245          250          255
63 Gly Asn Asp Thr Val Thr Glu Ser Ser Asp Gly Leu Trp Asn Asn Asn
64          260          265          270
65 Gln Thr Gln Leu Phe Leu Glu His Ser Leu Leu Thr Ala Asn Thr Thr
66          275          280          285
67 Lys Gly Val Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu
68          290          295          300
69 Leu Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp
70 305          310          315          320
71 Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp
72          325          330          335
73 Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly
74          340          345          350
75 Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn
76          355          360          365
77 Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp
78          370          375          380
79 Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu Pro
80 385          390          395          400
81 Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu
82          405          410          415
83 Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu Thr Lys Asn
84          420          425          430
85 Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile
86          435          440          445
87 Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr
88          450          455          460
89 Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys
90 465          470          475          480
91 Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys
92          485          490          495
93 Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu
94          500          505          510
95 Ser Leu Ser Pro Gly Lys
96          515
99 <210> SEQ ID NO: 2
100 <211> LENGTH: 357
101 <212> TYPE: PRT
102 <213> ORGANISM: Artificial Sequence
104 <220> FEATURE:
105 <223> OTHER INFORMATION: Human KIM-1 Partial Extracellular Domain Fc
106 Construct
108 <400> SEQUENCE: 2

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RAW SEQUENCE LISTING

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109 Met His Pro Gln Val Val Ile Leu Ser Leu Ile Leu His Leu Ala Asp
110 1 5 10 15
111 Ser Val Ala Gly Ser Val Lys Val Gly Gly Glu Ala Gly Pro Ser Val
112 20 25 30
113 Thr Leu Pro Cys His Tyr Ser Gly Ala Val Thr Ser Met Cys Trp Asn
114 35 40 45
115 Arg Gly Ser Cys Ser Leu Phe Thr Cys Gln Asn Gly Ile Val Trp Thr
116 50 55 60
117 Asn Gly Thr His Val Thr Tyr Arg Lys Asp Thr Arg Tyr Lys Leu Leu
118 65 70 75 80
119 Gly Asp Leu Ser Arg Arg Asp Val Ser Leu Thr Ile Glu Asn Thr Ala
120 85 90 95
121 Val Ser Asp Ser Gly Val Tyr Cys Cys Arg Val Glu His Arg Gly Trp
122 100 105 110
123 Phe Asn Asp Met Lys Ile Thr Val Ser Leu Glu Ile Val Pro Pro Lys
124 115 120 125
125 Val Val Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Leu
126 130 135 140
127 Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr
128 145 150 155 160
129 Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val
130 165 170 175
131 Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val
132 180 185 190
133 Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser
134 195 200 205
135 Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu
136 210 215 220
137 Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu Pro Ala
138 225 230 235 240
139 Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro
140 245 250 255
141 Gln Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu Thr Lys Asn Gln
142 260 265 270
143 Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala
144 275 280 285
145 Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr
146 290 295 300
147 Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu
148 305 310 315 320
149 Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser
150 325 330 335
151 Val Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser
152 340 345 350
153 Leu Ser Pro Gly Lys
154 355
157 <210> SEQ ID NO: 3
158 <211> LENGTH: 298
159 <212> TYPE: PRT

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160 <213> ORGANISM: Artificial Sequence
162 <220> FEATURE:
163 <223> OTHER INFORMATION: Human KIM-1 Extracellular Domain Histag Construct
165 <400> SEQUENCE: 3
166 Met His Pro Gln Val Val Ile Leu Ser Leu Ile Leu His Leu Ala Asp
167 1 5 10 15
168 Ser Val Ala Gly Ser Val Lys Val Gly Gly Glu Ala Gly Pro Ser Val
169 20 25 30
170 Thr Leu Pro Cys His Tyr Ser Gly Ala Val Thr Ser Met Cys Trp Asn
171 35 40 45
172 Arg Gly Ser Cys Ser Leu Phe Thr Cys Gln Asn Gly Ile Val Trp Thr
173 50 55 60
174 Asn Gly Thr His Val Thr Tyr Arg Lys Asp Thr Arg Tyr Lys Leu Leu
175 65 70 75 80
176 Gly Asp Leu Ser Arg Arg Asp Val Ser Leu Thr Ile Glu Asn Thr Ala
177 85 90 95
178 Val Ser Asp Ser Gly Val Tyr Cys Cys Arg Val Glu His Arg Gly Trp
179 100 105 110
180 Phe Asn Asp Met Lys Ile Thr Val Ser Leu Glu Ile Val Pro Pro Lys
181 115 120 125
182 Val Thr Thr Thr Pro Ile Val Thr Thr Val Pro Thr Val Thr Thr Val
183 130 135 140
184 Arg Thr Ser Thr Thr Val Pro Thr Thr Thr Thr Val Pro Thr Thr Thr
185 145 150 155 160
186 Val Pro Thr Thr Met Ser Ile Pro Thr Thr Thr Thr Val Pro Thr Thr
187 165 170 175
188 Met Thr Val Ser Thr Thr Thr Ser Val Pro Thr Thr Thr Ser Ile Pro
189 180 185 190
190 Thr Thr Thr Ser Val Pro Val Thr Thr Val Ser Thr Phe Val Pro
191 195 200 205
192 Pro Met Pro Leu Pro Arg Gln Asn His Glu Pro Val Ala Thr Ser Pro
193 210 215 220
194 Ser Ser Pro Gln Pro Ala Glu Thr His Pro Thr Thr Leu Gln Gly Ala
195 225 230 235 240
196 Ile Arg Arg Glu Pro Thr Ser Ser Pro Leu Tyr Ser Tyr Thr Thr Asp
197 245 250 255
198 Gly Asn Asp Thr Val Thr Glu Ser Ser Asp Gly Leu Trp Asn Asn Asn
199 260 265 270
200 Gln Thr Gln Leu Phe Leu Glu His Ser Leu Leu Thr Ala Asn Thr Thr
201 275 280 285
202 Lys Gly Val Glu His His His His His His
203 290 295
206 <210> SEQ ID NO: 4
207 <211> LENGTH: 1398
208 <212> TYPE: DNA
209 <213> ORGANISM: Murine
211 <220> FEATURE:
212 <223> OTHER INFORMATION: Human KIM-1 Extracellular Domain Fe Construct Fc
214 <400> SEQUENCE: 4

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RAW SEQUENCE LISTING

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215 atgaatcaga ttcaagtctt catttcaggc ctcatactgc ttctcccagg cactgtggat 60
216 tcttatgtgg aagtaaaggg ggtagtgggt caccctgtca cacttccatg tacttactca 120
217 acatatcgtg gaatcacaac gacatgttgg ggccgagggc aatgcccata ttctgcttgt 180
218 caaaatacac ttatttggac caatggacat cgtgtcacct atcagaagag cagtcggtac 240
219 aacttaaagg ggcataatttc agaaggagat gtgtccttga cgatagagaa ctctgttgag 300
220 agtgacagtg gtctgtattg ttgtcgagtg gagattcctg gatggtttta tgatcagaaa 360
221 gtgacctttt cattgcaagt taaaccagag attcccacac gtcctccaac aagaccaca 420
222 actacaaggc ccacagctac aggaagaccc acgactattt caacaagatc cacacatgta 480
223 ccaacatcaa tcagagtctc tacctccact cctccaacat ctacacacac atggactcac 540
224 aaaccagaac ccactacatt ttgtcccat gagacaacag ctgaggtgac aggaatccca 600
225 tcccatactc ctacagactg gaatggcact gcgacatcct caggagatac ctggagtaat 660
226 cacactgaag caatccctcc agggaagccg cagaaaaacc ctactaaggg cgtcgacaaa 720
227 actcacacat gcccaccgtg cccagcacct gaactcctgg ggggaccgtc agtcttctc 780
228 ttccccccaa aacccaagga caccctcatg atctcccga cccctgaggt cacatgcgtg 840
229 gtggtggagc tgagccacga agaccctgag gtcaagttca actggtacgt ggacggcgtg 900
230 gaggtgcata atgccaagac aaagccgagg gaggagcagt acaacagcac gtaccgtgtg 960
231 gtcagcgctc tcaccgtcct gcaccaggac tggctgaatg gcaaggagta caagtgcaag 1020
232 gtctccaaca aagccctccc agcccccatc gagaaaacca tctccaaagc caaagggcag 1080
233 ccccgagaac cacaggtgta caccctgccc ccatcccggg atgagctgac caagaaccag 1140
234 gtcagcctga cctgcctggg caaaggcttc tatcccagcg acatcgccgt ggagtgggag 1200
235 agcaatgggc agccggagaa caactacaag accacgcctc ccgtgttgga ctccgacggc 1260
236 tccttcttcc tctacagcaa gctcaccgtg gacaagagca ggtggcagca ggggaacgtc 1320
237 ttctcatgct ccgtgatgca tgaggctctg cacaaccact acacgcagaa gagcctctcc 1380
238 ctgtctcccg ggaaatga 1398

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240 <210> SEQ ID NO: 5

241 <211> LENGTH: 465

242 <212> TYPE: PRT

243 <213> ORGANISM: Artificial Sequence

245 <220> FEATURE:

246 <223> OTHER INFORMATION: KIM-1 Fc Fusion

248 <400> SEQUENCE: 5

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249 Met Asn Gln Ile Gln Val Phe Ile Ser Gly Leu Ile Leu Leu Leu Pro
250 1 5 10 15
251 Gly Thr Val Asp Ser Tyr Val Glu Val Lys Gly Val Val Gly His Pro
252 20 25 30
253 Val Thr Leu Pro Cys Thr Tyr Ser Thr Tyr Arg Gly Ile Thr Thr Thr
254 35 40 45
255 Cys Trp Gly Arg Gly Gln Cys Pro Ser Ser Ala Cys Gln Asn Thr Leu
256 50 55 60
257 Ile Trp Thr Asn Gly His Arg Val Thr Tyr Gln Lys Ser Ser Arg Tyr
258 65 70 75 80
259 Asn Leu Lys Gly His Ile Ser Glu Gly Asp Val Ser Leu Thr Ile Glu
260 85 90 95
261 Asn Ser Val Glu Ser Asp Ser Gly Leu Tyr Cys Cys Arg Val Glu Ile
262 100 105 110
263 Pro Gly Trp Phe Asn Asp Gln Lys Val Thr Phe Ser Leu Gln Val Lys
264 115 120 125
265 Pro Glu Ile Pro Thr Arg Pro Pro Thr Arg Pro Thr Thr Arg Pro
266 130 135 140

```

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/540,959

DATE: 07/12/2005

TIME: 10:04:23

Input Set : D:\A184seq.txt

Output Set: N:\CRF4\07122005\J540959.raw

L:12 M:270 C: Current Application Number differs, Replaced Current Application Number

L:13 M:271 C: Current Filing Date differs, Replaced Current Filing Date